

Title (en)

Angular position sensor, code disc and procedure to determine a reference value

Title (de)

Drehwinkelaufnehmer, Markenscheibe sowie Verfahren zur Ermittlung eines Referenzwertes"

Title (fr)

Capteur de positions angulaires, disque codeur et procédé pour déterminer une valeur de référence

Publication

EP 1258711 A3 20070321 (DE)

Application

EP 02450080 A 20020410

Priority

AT 3942001 U 20010517

Abstract (en)

[origin: US2002170187A1] The invention involves a marked plate for a rotational angle sensor element for rotating structural parts, with many angle marks provided preferably oriented radially to the rotational axis and preferably arranged in the form of a collar arranged concentrically to the rotational axis and with at least one reference mark, which is formed by an angle mark that deviates in its modulating properties and thus is integrated in the collar of the angle marks. An angle sensor element system for rotating structural parts includes a marked plate that can be coupled to the rotating structural part and that merely has a collar of angle marks with integrated reference marks and a fixed scanning unit for it, including at least one transmitter of electromagnetic radiation and at least one receiver for the radiation modulated by the marked plate, as well as mechanisms for connection to an evaluation unit. In order to distinguish the reference marks with certainty from the remaining angle marks, a process for determining a reference value from an analog signal provides that for each angle and reference mark, from an analog peak value of the preceding angle marks, an peak value continuing the trend of peak values is determined and is used in the evaluation unit, changed by a defined value, as a threshold for the presence of the reference value that deviates in its modulation.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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- [X] US 4421980 A 19831220 - KUEHNE CHRISTOPH [DE]
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Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

Designated extension state (EPC)

AL LT LV MK RO SI

DOCDB simple family (publication)

US 2002170187 A1 20021121; **US 6844542 B2 20050118**; AT 4976 U1 20020125; EP 1258711 A2 20021120; EP 1258711 A3 20070321; EP 1258711 B1 20160615; JP 2003042802 A 20030213; JP 4512308 B2 20100728

DOCDB simple family (application)

US 14631802 A 20020515; AT 3942001 U 20010517; EP 02450080 A 20020410; JP 2002142779 A 20020517